



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

MEMORANDUM TO: Project Engineers
Project Design Engineers

FROM: G. R. Perfetti, PE
State Bridge Design Engineer

DATE: December 3, 2010

SUBJECT: ARMORED EVAZOTE JOINTS

At the request of the Construction and Bridge Management Units armored evazote joints will no longer be used. Detail a standard expansion joint seal with hold-down plates for bridge joints with a calculated total thermal movement, $M_{TOT} \leq 2.5"$ (64 mm) and located on one of the following:

- Interstates;
- US Routes;
- NC Routes with a design year ADT $\geq 10,000$;
- NC Routes with a design year ADTT ≥ 500 .

Detail unarmored evazote joints in accordance with the Design Manual. For joints located at the end of the approach slab, e.g. joints for integral abutment bridges, detail evazote joint seals with elastomeric concrete headers, regardless of location or traffic volume.

When expansion joint seals are required at end bents, extend the barrier rail onto the approach slab for a minimum length of 10 feet (3.05 m), then transition to a 4" tall x 8" (100 mm x 203 mm) wide triangular curb for the remaining length of approach slab. Note that, in order to accommodate the barrier rail, the approach slab will not have a constant width. Coordinate with the Roadway Design Unit on the location of the approach guardrail.

This policy is effective with the February 2011 letting. Chapter 6 of the Design Manual has been updated and standard drawing AEJ1 – Armored Evazote Joint Details has been removed from the lineup.

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GRP/GM

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